Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act (OSHA) was enacted in December 1970 to assure safe and healthful working conditions for U.S. workers. According to the act, that objective is to be met by authorizing enforcement of standards developed under the law, helping and encouraging States in their efforts to assure safe and healthful working conditions, and providing for research, information, education, and training in the field of occupational safety and health.

Congress declared its intent in the legislation, under its powers to regulate domestic and international commerce and to provide for the Nation's general welfare, to assure healthful working conditions for all workers and to preserve the country's human resources. Congress established specific duties for employers in the "general duty clause" (section 5 of the act). The employer's duty is to furnish each employee employment and a workplace free from recognized hazards causing or likely to cause death or serious physical harm. The employer is also responsible for complying with occupational safety and health standards set forth in the law.

The employee's duty, under the law, is to comply with those standards and with all rules, regulations, and orders issued after the law's passage that apply to his or her own actions and conduct (8).

How the Law Applies to Agricultural **Employment**

U.S. Department of Labor regulations place every employer, unless specifically exempt, under OSHA coverage. Two exemptions greatly reduce the coverage of agricultural employment. First, members of the immediate family of the farm employer are not considered employees and are excluded from coverage (2). Second, Congress has usually attached riders to annual appropriations bills for the U.S. Department of Labor that exclude from OSHA protection all agricultural workers in agricultural operations employing 10 or fewer workers (excluding family members) within the last 12 months, except where temporary labor camps are maintained or have been maintained in the last 12 months (table 2). The U.S. Department of Labor has interpreted this to mean that whenever a farm operation has more than 10 workers employed on 1 day, the operation is subject to OSHA

regulations. In 1997, about 9 percent of U.S. farms employed 10 or more hired workers (14). These farms employed about half of the hired farmworkers in 1997 (14). Thus, OSHA regulations apply to less than 10 percent of farm employers and about half of the hired farmworkers. Farm employers should note two important things about the 10-or-fewer-employees exemption. First, the exemption is a year-to-year exemption granted by Congress and could be ended with little advance notice. Second, the exemption applies only if the operation employs 10 or fewer employees currently and at all times during the last 12 months. Had the 10-or-fewer-employees exemption been written into regulations, as in the OSHA Field Sanitation Standard (see the definition for "field sanitation standard" in this section), employers would have been given advance notice of the proposed change and would have had an opportunity to present evidence against changing the regulation. The act covers agricultural employment that does not meet either of these exemptions.

The major provisions of the act cover temporary labor camps, tractor roll-over protection, guarding of farm field equipment, storage of anhydrous ammonia, field sanitation, hazard communication, cadmium usage, and logging operations. The cadmium and logging operations provisions are major changes since 1992. These provisions, along with their application to agricultural employment are summarized in table 3. Some definitions and explanations contained in regulations that enforce the act's provisions help determine its applicability to specific situations.

Definitions

The definitions and explanations presented here are limited to key terms as they apply to standards governing agricultural employment. Readers seeking more detailed information should contact the nearest office of the Occupational Safety and Health Administration and consult 29 Code of Federal Regulations and Title 29 United States Code.

Farming operation "means any operation involved in the growing or harvesting of crops, raising of livestock or poultry, or related activities conducted by a farmer on site such as farms, ranches, orchards, dairy farms, or similar farming operations. These operators are

Table 2--Occupational Safety and Health Administration enforcement exceptions and limitations under the Appropriations Act

OSHA activity	Farms with 10 or fewer employees and no temporary labor camp activity within 12 months	Farms with more than 10 employees or a farm with an active temporary labor camp within 12 months	Nonfarm employer with 10 or fewer employees in SIC's ¹ with a lost workday injury rate below the national private sector rate
Programmed safety inspections	Not permitted	Can inspect	Cannot inspect
Programmed health inspections	Not permitted	Can inspect	Can inspect
Employee complaint	Not permitted	Can inspect	Can inspect
Fatalities/catastrophes and accidents	Not permitted	Can inspect	Can inspect
Imminent danger	Not permitted	Can inspect	Can inspect
Investigations to determine if employee was fired as a result of making a complaint	Not permitted	Can inspect	Can inspect
Consultation and technical assistance	Not permitted	Permitted	Permitted
Education and training	Not permitted	Permitted	Permitted
Conduct surveys and studies	Not permitted	Permitted	Permitted

¹Specific SIC's are contained in appendix A of Enforcement Exceptions and Limitations Under the Appropriations Act, OSHA Directive No. CPL 2-0.51J. May 28, 1998.

Source: Enforcement Exceptions and Limitations Under the Appropriations Act, OSHA Directive No. CPL 2-0.51J. May 28, 1998.

engaged in businesses that have a two-digit Standard Industrial Classification (SIC) of 01 (Agricultural Production-Crops), 02 (Agricultural Production-Livestock and Animal Specialties), and four-digit SIC 0711 (Soil Preparation Services), 0721 (Crop Planting, Cultivating, and Protecting), 0722 (Crop Harvesting, Primarily by Machine), 0761 (Farm Labor Contractors and Crew Leaders), and 0762 (Farm Management Specialists)" (20).

Housing "includes both permanent and temporary structures located on or off the property of any employer" (20).

Temporary labor camp means "farm housing directly related to the seasonal or temporary employment of farm workers" (20). Standards for temporary labor camps govern all temporary labor camps in which migrant housing is provided and on which construction was started after April 3, 1980. These camps must comply with Federal safety and health standards put into effect by the Occupational Safety and Health Administration (2). Temporary labor camps completed

or being built before April 3, 1980, or under contract to be built before March 3, 1980, may choose to comply with either the OSHA standards or the standards of the Employment and Training Administration of the U.S. Department of Labor.

The *field sanitation standard* spells out requirements on potable water, sanitation, and cleanliness to be met on labor work sites for farm field hands. While the Department of Labor's emphasis is on farmworker health and safety, a recent report by the U.S. Department of Health and Human Services emphasized field sanitation as part of an overall effort to minimize microbial food safety hazards (16). The field sanitation standard contains the appropriations law exemption for agricultural operations of 10 or fewer employees (unless operations maintain a temporary labor camp). The U.S. Department of Labor interprets this to mean that the field sanitation standard applies to a farming operation that has employed 11 or more employees (including contractor's employees) on any given day during the

Table 3--Occupational Safety and Health Act of 1970: Summary of applicability to agriculture and penalties for violations

Provisions	Exemptions for agriculture	Basis for agricultural exemptions	Enforcement
Must meet standard developed for site, shelter, water supply, oilet facilities, lighting, refuse disposal, construction, and operation of kitchens, dining hall, and feeding facilities, insect and rodent control, first aid, and reporting of communicable disease violations.	None	None	Responsible agency Occupational Safety and Health Administration (OSHA), U.S. Department of Labor. Penalties Based on the severity of the conditions and the firm's history of OSHA
Field sanitation Agricultural employers operating qualifying establishments are equired to provide employees who do hand labor operations in the field with potable drinking water, toilet facilities, and hand-washing facilities, to maintain these facilities, o inform employees of the importance of specific hygiene practices, and o allow reasonable use in the field without cost to the employees.	Partial	 Limited to hand fieldwork. Ten or fewer employees at all times during the past 12 months. Do not have to provide toilet and hand-washing facilities when employees will be working fewer than 3 hours (including transportation time). Farms where only immediate family members are employed. 	Same as above
Agricultural employers are required o establish a hazard communication program to provide employees with information about the hazardous chemicals, other than pesticides, o which they might be exposed.	Partial	Same as above	Same as above
Cadmium Agricultural employers are required o monitor the air in areas where employees are exposed to cadmium, and if level of exposure is above minimum allowed, employees must be notified, and provided with necessary protective equipment.	Partial	Same as above	Same as above
Agricultural employers who have ogging operations, as defined by he standard, must provide specific training on hazards and work practices, first aid, and CPR. They must also assure that personal protective equipment, tools, and machinery are provided, mainained, and used in a safe manner.	Partial	Same as above	Same as above

Table 3--Occupational Safety and Health Act of 1970: Summary of applicability to agriculture and penalties for violations--Continued

	Provisions	Exemptions for agriculture	Basis for agricultural exemptions	Enforcement
0th	er key provisions Rules governing storage and handling of anhydrous ammonia.	Partial	Same as above	Same as above
2.	Safety requirements for slow-moving vehicles (less than 25 m.p.h.).			
3.	Roll-over protective structures for tractors used in agricultural operations.			
4.	Safety devices for farm field equipment, farmstead equipment, and cotton gins.			
5.	Post notices informing employees of OSHA protections and obligations and how to get copies of the act or specified standard.			
6.	Post citations near location of violation where they will be readily seen by affected employees.			
7.	Post annual summary of occupational injuries and illnesses.			
8.	Notify nearest OSHA area office within 48 hours of any accident that is fatal to one or more employees or results in the hospitalization of three or more employees.			
9.	Maintain records of occupational injuries and illnesses for 5 years at end of year in which they occur.			
10.	Insure the ready availability of medical persons for advice on matters of workplace health.			
12.	Provide a person (or persons) who are trained to render first aid when an infirmary, clinic, or hospital is not near the work-place. Make physician-approved first aid supplies readily available.			
13.	Provide a suitable emergency facility within the work area for the quick drenching of eyes and body. This facility would be for use of any person who may be exposed to injuries or corrosive materials on the job.			

Source: Compiled by USDA, ERS from 29 Code of Federal Regulations and Title 29 United States Code.

previous 12 months. Key terms used in the standard follow.

Potable water means "water that meets the standards for drinking purposes of the State or local authority having jurisdiction or water that meets the quality standards prescribed by the U.S. Environmental Protection Agency's Interim Primary Drinking Water Regulations, published in 40 Code of Federal Regulations, Part 141" (3). Agricultural employers should note that the drinking water available on their farms might not meet the standards for potable water.

Hand washing facility is a "facility providing either a basin, container, or outlet with an adequate supply of potable water, soap, and single-use towels" (2). One hand-washing facility must be provided for each 20 employees or a fraction thereof.

Toilet facility means a fixed or portable facility designed to adequately collect and contain human waste and is supplied with toilet paper adequate to employee needs. Toilet facility includes "biological, flush, and combustion toilets and sanitary privies" (2).

Maintaining facilities means that "potable drinking water and toilet and hand washing facilities shall be maintained in accordance with appropriate public health sanitation practices" (2). For example:

- Drinking water containers must maintain water quality, be refilled as often as necessary (at least daily), be covered, and be generally clean.
- Toilet facilities must be in working order and be kept clean and sanitary.
- Hand-washing facilities must have an adequate supply of potable water and be kept clean and sanitary.
- Disposal of waste from facilities must not cause unsanitary conditions (2).

Reasonable use is a term that goes beyond meaning merely allowing employees reasonable opportunities to use sanitation facilities. According to the field sanitation standard, it means:

The employer also shall inform each employee of the importance of each of the following good hygiene practices to minimize exposure to the hazards in the field of heat, communicable diseases, retention of urine, and agrichemical residues:

- (i) Use the water and facilities provided for drinking, hand washing, and elimination;
- (ii) Drink water frequently, especially on hot
- (iii) Urinate as frequently as necessary;
- (iv) Wash hands both before and after using the toilet; and
- (v) Wash hands before eating and smoking (2).

The hazard communication standard requires all employers to provide information to their employees about the hazardous chemicals (except pesticides, which are regulated by the U.S. Environmental Protection Agency) to which they are or may be exposed. The information is to be provided through a written hazard communication program consisting of labels and other forms of warning, materials safety data sheets (MSDS), and information and training. Chemical manufacturers and importers, not employers, are required to evaluate chemicals they produce or import.

Each employer must develop, implement, and maintain at the workplace a written hazard communication program for the workplace. The hazard communication program will describe how the requirements for labels and other forms of warning, MSDS, and information and training will be met. The program also includes a list of hazardous chemicals known to be present (that must be properly referenced to an MSDS) and notes the methods the employer will use to inform employees of the hazards of nonroutine tasks. The employer is required to make the written hazard communication program available, upon request, to employees or their designated representatives, as well as the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor; and the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services.

The chemical manufacturer, importer, or distributor must ensure that each container of hazardous chemicals is labeled with the identity of the hazardous chemical, appropriate hazard warnings, name of manufacturer, importer, or other responsible party. The employer is responsible for ensuring that the labels (or some other written material containing the

labeling information) are attached to each container of hazardous chemicals in the workplace. These labels or other forms of warning are to be legible, written in English, and either prominently displayed on the container or readily available in the work area.

MSDS are prepared or obtained by manufacturers or importers for each hazardous chemical they produce or import. Employers must have an MSDS for each hazardous chemical they use. The employer must ensure that an MSDS is either provided with each shipment or obtained from the manufacturer, importer, or distributor as soon as possible. The employer must also maintain copies of the required MSDS for each hazardous chemical in the workplace and ensure that they are readily accessible to employees when they are at work. If employees must travel between workplaces during a work shift, the MSDS may be kept at a central location at the primary workplace as long as the employees can immediately obtain the required information in an emergency. An MSDS may be kept in any form and may be designed to cover groups of hazardous chemicals in a work area where it may be more appropriate to address the hazards of a process than individual hazardous chemicals. An MSDS must be made readily available, upon request to employees or their designated representatives; the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor; and the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services.

Employers are also required to provide employees with information and training on hazardous chemicals in their workplace when employees are first assigned to the workplace and whenever a new hazard (not a new chemical) is introduced to the work area.⁷ The information that must be provided to employees was discussed earlier in this section (labels, MSDS, etc.). Employee training must include a demonstration of methods to detect the presence or release of a hazardous chemical in the work area, point out the physical and health hazards of the chemicals in the work area, and show employees the measures they can take to protect themselves from these hazards. These measures include specific protective procedures the employer has implemented for employees (for

example, appropriate work practices, emergency procedures, and personal protective equipment). Training must be provided to give employees the details of the hazard communication program the employer has developed.

The Cadmium Standard "applies to all occupational exposures to cadmium and cadmium compounds" (2). Cadmium exposure in agriculture would most likely occur where large quantities of fertilizer and/or pesticides are stored or handled, and where employees may be soldering or welding metal that contains cadmium. This standard requires a covered employer to determine if any employee may be exposed to cadmium at or above the minimum acceptable level (called the action level).8 If the initial monitoring indicates exposure to be at or above the action level, the employer must continue exposure monitoring at least every 6 months, unless the exposure drops below the action level. The employer must notify each affected employee, in writing, within 15 days after receiving the results of monitoring. Whenever monitoring results indicate that employee exposure exceeds the "permissible exposure limit (PEL)," the employer must include in the written notice that the PEL has been exceeded and a description of the corrective action being taken to reduce exposure to or below the PEL.9

The employer is required to establish a regulated area that is demarcated from the rest of the workplace in any manner that adequately establishes and alerts employees of the boundaries of the regulated area. Access to the regulated area will be limited to authorized persons who will be required to wear employer-provided respirators that meet accepted standards, and in some situations employees may be required to wear protective clothing and eye protection (these must also be employer-provided). Employers must not allow employees to eat, drink, smoke, chew tobacco or gum, or apply cosmetics in regulated areas, carry the products associated with these activities into regulated areas, or store such products in those areas. In addition to these requirements, the employer has to

⁷For example, if a new chemical is brought into the workplace, and it has hazards similar to existing chemicals for which training has already been conducted, no new training is required.

^{8&}quot;As an airborne concentration of cadmium, the action level is 2.5 micrograms per cubic meter of air..., calculated as an 8-hour time-weighted average (TWA)" (2).

⁹"Permissible Exposure Limit (PEL). The employer shall assure that no employee is exposed to an airborne concentration of cadmium in excess of 5 micrograms per cubic meter of air... calculated as an 8-hour time-weighted average exposure (TWA)" (2).

provide employees with showers and hand-washing facilities, medical removal protection benefits, medical surveillance, monitored lunch rooms, and other requirements as mandated by the standard (2).

The *logging operations standard* "establishes safety practices, means, methods, and operations for all types of logging regardless of the end use of the wood. These types of logging include, but are not limited to, pulpwood and timber harvesting and the logging of sawlogs, veneer bolts, poles, pilings and oher forest products" (2). The standard defines logging operations, as "operations associated with felling (cutting) and moving trees and logs from the stump to the point of delivery, such as, but not limited to, marking danger trees, (standing trees that present a hazard to an employee because of condition and/or direction and lean, and trees/logs to be cut to length), felling, limbing (removing limbs and branches), bucking (cutting or splitting trees into manageable logs), debarking, chipping, varding (removing cut trees and logs), landing (a central location), loading, unloading, storing, and transporting machines, equipment, and personnel from one logging site to another" (2).

If more than 10 employees on a farm are engaged in a logging operation, as defined above, at any time, the employer must adhere to the standard and provide and assure that employees use personal protective equipment (that protects hands, heads, legs, feet, eyes, and faces) and seat belts. All employees must be trained in CPR and first aid (requirements are in the standard). The employer must also provide first-aid kits (contents of which are listed in the standard), fire extinguishers, and a safe environment. A safe environment includes:

- Not working in inclement weather,
- Spacing duties of each employee so the actions of one employee will not create a hazard for any other employee,
- Ensuring that employees use proper tree-felling techniques,
- Establishing a system of visual or audible contact between employees at all times,
- Accounting for each employee at the end of each work shift.

- Providing properly guarded and maintained equipment, and
- Implementing several other actions spelled out in the standard.

Other key terms relate to safety in the agricultural workplace. The Code of Federal Regulations defines the following farm equipment terms.

Agricultural tractor means "a two- or four-wheel drive type vehicle, or track vehicle, of more than 20-engine horsepower, designed to furnish the power to pull, carry, propel, or drive implements designed for agriculture. All self-propelled implements are excluded" (2). All tractors manufactured after October 5, 1976, that are operated by hired workers must be equipped with roll-over protective structures (ROPS), except for the following: "low profile" tractors while they are used in orchards, vineyards, or hop yards where the vertical clearance requirements would substantially interfere with normal operations and while their use is incidental to the work performed therein; "low profile" tractors while used inside a farm building or greenhouse in which the vertical clearance is insufficient to allow the ROPS-equipped tractor to operate and while their use is incidental to the work performed therein; and tractors while used with mounted equipment which is incompatible with ROPS (for example, corn pickers, cotton strippers, vegetable pickers, and fruit harvesters) (2).10 Another exception to the ROPS standard appears in the logging operations standard. This standard requires that all tractors placed in initial service after February 9, 1995, operated by hired workers be equipped with FOPS (falling objects protective structures) and ROPS and that these devices be reinstalled on tractors from which they had been removed.

Every employee who operates an agricultural tractor must be informed of the following operating practices at the time of initial assignment and at least annually thereafter:

¹⁰A low profile tractor is one in which front-wheel spacing equals the rear-wheel spacing (as measured from the centerline of the right wheel to the centerline of the corresponding left wheel), the clearance from the bottom of the tractor chassis to the ground does not exceed 18 inches, the highest point of the hood does not exceed 60 inches, and the operator straddles the transmission when seated (2).

- Securely fasten your seat belt if the tractor has ROPS.
- Where possible, avoid operating the tractor near ditches, embankments, and holes.
- Reduce speed when turning, crossing slopes, and on rough, slick, or muddy surfaces.
- Stay off slopes too steep for safe operation.
- Watch where you are going, especially at row ends, on roads, and around trees.
- Do not permit others to ride on the machine.
- Operate the tractor smoothly--no jerky turns, starts, or stops.
- Hitch only to the drawbar and hitch points recommended by tractor manufacturers.
- When tractor is stopped, set brakes securely and use park lock if available (2).

Farm field equipment means "tractors or implements, including self-propelled, or any combinations thereof used in agricultural operations" (2).

Farmstead equipment means "agricultural equipment normally used in a stationary manner. This includes, but is not limited to, materials-handling equipment and accessories for such equipment whether or not the equipment is an integral part of a building" (2).

Sign "refers to a surface prepared for the warning of, or safety instructions of, industrial workers or members of the public who may be exposed to hazards. Excluded from this definition, however, are news releases, displays commonly known as safety posters, and bulletins used for employee education" (2). There are three classifications of signs according to use--danger, caution, and safety instruction. Danger signs warn of specific dangers and radiation hazards. All employees must be instructed that these signs indicate immediate danger and that special precautions are necessary. Caution signs must be used to warn against potential hazards or to caution against unsafe practices. All employees must be instructed that these signs indicate a possible hazard against which proper precaution should be taken. Safety instruction signs must be used where there is a need for general instructions and suggestions relative to safety measures. Each of these signs has specific color and design characteristic requirements spelled out in the standards.

The slow-moving vehicle emblem consists of a fluorescent yellow-orange triangle with a dark red reflective border. This emblem is intended as a unique identification and should be used only on vehicles which by design move slowly (25 m.p.h. or less) on the public roads. The emblem is not a clearance marker for wide machinery nor is it intended to replace required lighting or marking of slow-moving vehicles (2).

In the rare case where a substance constituting a biological hazard ("infectious agent presenting a risk or potential risk to the well-being of man") is kept on a farm, biological hazard signs must be posted (2).

Enforcement

The Occupational Safety and Health Administration is authorized to conduct workplace inspections to assure compliance with the law. With few exceptions, inspections are conducted without advance notice. Safety and health officers, upon presenting appropriate credentials to the owner, operator, or agent in charge, are authorized to enter a workplace without delay and at reasonable times. The safety and health officer must get a search warrant when an employer refuses admission for inspection. In addition to Occupational Safety and Health Act (OSHA) inspections, if a compliance officer of the Wage and Hour Division, while conducting investigations, is presented with information concerning noncompliance with OSHA, this information will be given to OSHA. In States in which the State plan does not include enforcement of temporary labor camp or field sanitation standards, the Wage and Hour Division has assumed enforcement authority.

Penalties are proposed based on the severity of conditions, the good-faith effort of the employer to remedy problems, the employer's size, and the firm's history of OSHA violations. Not every citation results in a penalty. Serious and willful violations carry a mandatory proposed penalty, while less serious violations may carry no penalty. Penalties may also be proposed for repeated violations and when the employer fails to correct safety and health hazards. Penalties for violations, where appropriate, will be proposed, even if the employer (after being informed by the safety and health officer) immediately eliminates or takes steps to correct or abate the hazards. The act also provides for criminal prosecution in certain situations when an employer

commits a willful violation that results in a worker's death.

Summary

The Occupational Safety and Health Act of 1970 was enacted to assure safe and healthful working conditions for U.S. workers. The OSHA standards affecting agricultural employers and employees cover temporary labor camps, field sanitation, hazard communication, cadmium exposure, logging

operations, storage and handling of anhydrous ammonia, roll-over protection, safety practices of slow-moving vehicles, and guarding of farm field equipment, farmstead, and cotton gins.

Congress has added riders to annual appropriation bills exempting farm operations that employ 10 or fewer employees and do not maintain a temporary labor camp. Employers should remember that the 10 or fewer employees exemption granted by Congress could be ended on short notice.